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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,040	11/28/2000	Manfred Boldy	DE91999009US1	6054

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IBM CORPORATION
PO BOX 12195
DEPT 9CCA, BLDG 002
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

ABDULSELAM, ABBAS L

ART UNIT PAPER NUMBER

2674

DATE MAILED: 09/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

HGS

Office Action Summary

Application No.

09/724,040

Applicant(s)

BOLDY, MANFRED

Examiner

Abbas I Abdulsalam

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

1. A copy of a foreign document has been received.

Claim Rejections 35 U.S.C. 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levy (USPN 5973621) in view of Stracener (USPN 4449024).

Regarding claim 1, Levy teaches actuateable key switches used for a keypad device. Levy teaches keyboards as well as each key being actuated independently by means of dome (52) (Figure 5) providing a contact point with a finger. See col. 1, lines 36, 50 and Fig 5, 9, 21. Levy teaches as example a finger actuating the function "number 7" in a telephone keypad. See Fig 1. Levy also teaches elastomeric arrangement in which components are adhesively put together. However, Levy does not disclose a dome that has a pin shaped projection on a convex side of the arrangement. Stracener on the other hand teaches a light diffuser plate (18) including multiple dome actuating pin guide sections (30), a pin with a body portion (32a), annular flange (32b), and projections (32c) below the flange. See col. 3, lines 36-43, Fig 2, Fig 3 and Fig 5.

Therefore it would have been obvious to one skilled in the art at the time the invention was made to modify Levy's keypad input device to include Stracener's light diffuser plate. One would have been motivated in view of the suggestion in Stracener that the diffuser plate provides

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the desired dome with a pin-shaped projection configuration. The use of a light diffuser plate helps make up an effective keyboard assembly as taught by Stracener.

Regarding claim 2, Levy teaches a contact surface with respect to elastomeric or plastic material. See col. 3, lines 65-67 and col. 4, lines 1-3.

Regarding claims 3-4, Stracener teaches symmetrically arranged switch sites (21) and dome retainer (22), which has an adhesive underside disposed on multiple domes (33). See col. 2, lines 64-68 and Fig 2.

Regarding claims 5-6, See Stracener's Fig.2 including domes (23) and a dome seal (22).

Regarding claims 7-9, Stracener teaches a light diffuser, which includes dome actuating pin guide sections (30) and projections (32c).

Regarding claims 10-11, Levy teaches a dome (52) with respect to structure contact surface (90) and various modifications with respect to the configuration of the dome. See col. 11, 47-61 and col. 12, 7-16.

Conclusion

3. The prior art made of record and not relied upon is considered to applicant's disclosure.

The following arts are cited for further reference.

U.S. Pat. No. 5,107,739 to Muramatsu et al.

U.S. Pat. No. 5,219,067 to Lima et al.

U.S. Pat. No. 5,280,145 to Mosier et al.

U.S. Pat. No. 5,428,355 to Jondrow et al.

U.S. pat. No. 5,473,325 to McAlindon

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4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abdulsalam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand delivered responses should be brought to crystal park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Abbas Abdulsalam

Examiner

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